



ATTACHMENT 6 – BUDGET

The budget for the proposed project is summarized in **Table 6.1** below:

Table 6.1 - Budget Summary

Task	Budget Category	Requested Grant	District Contribution	Total
1	Public Outreach	\$4,250	\$0	\$4,250
2	Monitoring Well Design	\$18,100	\$0	\$18,100
3	Monitoring Well Construction	\$209,184	\$0	\$209,184
4	Post Construction Activities	\$10,480	\$0	\$10,480
5	Project Reporting	\$8,136	\$5,209	\$13,195
	Total Project Cost	\$255,209	\$5,209	\$255,209

Below is a list of supporting documents for the budget:

Exhibit 6.1 – Detailed Project Cost Estimate

Exhibit 6.2 – Construction Cost Estimate

Exhibit 6.3 – Vendor Price Quotation for Data Loggers

Exhibit 6.4 – Laboratory Costs for Water Quality Testing

The budget items are consistent with the work plan and budget. Additional details on the cost estimate follow.

Monitoring Well Costs

Monitoring well construction costs were estimated based on a June 2012 quote received from a local well driller, Bradley & Sons, who specializes in monitoring well construction in the local area. The contractor prepared construction cost estimate is included as **Exhibit 6.2**. Well drilling contractor Bradley & Sons constructed the 2009 Local Groundwater Assistance funded monitoring wells in neighboring James Irrigation District, on-time and in budget. The estimate assumes that workers are paid Fresno County prevailing wages, certified payroll is performed, and labor compliance procedures conducted.



It should be noted that costs for monitoring wells in the project area can vary significantly, and have varied significantly in recent years. Monitoring well costs vary with hydrologic conditions (generally higher during dry years), contractor availability, fuel costs and cost for materials. Costs for construction materials like PVC pipe have been erratic in recent years, varying with the ups and down of petroleum costs and supply and demand. Well drilling costs are also impacted significantly by the cost of fuel, as well as ever increasing costs in liability and workers compensation insurance. Therefore, it is possible that the monitoring well costs could vary considerably from the estimate provided. During project implementation, any significant change in costs would be reported to the DWR as soon as the information is available so that discussions can be held on modifying the budget and scope of work. However, it is believed that the cost estimate provided is the best and most reasonable value that can be provided more than one year in advance of the anticipated well construction.

Data Logger Costs

Data loggers are proposed to be placed in each monitor well casing (5 locations – MW-1, MW-2, MW-3, MW-4 & MW-5) and four former agricultural irrigation or municipal wells (MW-19B, MW-TW#1, MW-TW#2 & MW-TW#3). Equipment costs were estimated based on a June 2012 quote received from a common equipment supplier used in nearby Districts, Schlumberger Water Services. The equipment supplier prepared equipment quote is included as **Exhibit 6.3**. The data loggers will be purchased directly by the District and will not be marked up.

Water Quality Sampling and Testing

Groundwater testing will include irrigation suitability analysis in all five wells, and arsenic in one double completion well (MW-1 and MW-2) located in the drinking water area. A water testing price sheet from a local laboratory is included as **Exhibit 6.4**. Irrigation suitability analyses cost \$100 per sample. A local laboratory provided a verbal quote of \$24 to test for arsenic. Therefore, testing costs for the proposed project are summarized as follows:

Irrigation Suitability

(5 well casings + 1 blank samples + 1 replicate samples) x \$100/sample = \$700

Arsenic

(2 well casings + 1 blank sample) x \$24/sample = \$73

The total costs after a 15% markup are $(773 \times 15\%) = \$890$, which is rounded to \$900.

Legal Fees

The budget includes a nominal \$1,000 budget for legal fees. The legal fees will be for the District's legal counsel to review bidding documents and assist with permitting efforts, if



needed. No substantial legal services are expected to be needed, so the nominal budget is considered adequate.

Consultant Fees

Consultant fees were provided by TID's consulting engineer, Provost & Pritchard Consulting Group, and are based on their standard fee schedule.

Subconsultant

Subconsultant fees include \$1,000 for Kenneth D. Schmidt & Associates, a hydrogeologic consultant who will provide independent third-party review. All subconsultant fees will include a standard 15% markup.

Permits

Permits to construct monitoring wells have no fee in Fresno County. Encroachment permits for constructing wells on County road right-of-ways are based on the cost of the project and estimated to be about \$500. These fees are built into the construction cost estimate, since the driller will be required to obtain them.

Mileage

No mileage, per diem or lodging costs are included in the cost estimate as it has been understood from past Proposition 84 funded projects, that DWR does not allow travel charges to the project. Mileage for the project is based on trips between Clovis, Fresno County, the location of the proposed consultants, and the project site located in an unincorporated area of Fresno County. Trips will be needed to verify well locations, conduct pre-bid and pre-construction meetings with contractors, monitor construction, collect water quality samples, and survey well elevations. Each trip from Clovis to Tranquillity is 40 miles round trip. It is assumed that 35 total round trip are made during the project, most to observe construction and log soils. TID is prepared to fund any travel costs not allowed by DWR. If allowed, TID will request reimbursement by their consultant.

Administrative Tasks

Administrative costs will be limited to Sub-task 5.1 – Progress Reports, which total \$3,545, which is about 1.4% of the requested grant amount.

Contingency

There is no contingency built into the project cost. TID is prepared to pay the estimated amount of \$5,059 over the \$250,000 grant and for extra costs if they exceed the estimate by a



small amount. If well drilling bids are substantially higher than anticipated, TID may contact DWR to discuss modifying the scope of work or budget.

Project Tracking and Billing

It is proposed to track and bill the project according to the five (5) tasks in budget. Budgets will not be tracked or billed by subtask. Tracking cost according to each sub-task would be cumbersome and would not add to understanding the project's cost.

District Cost Share

The District cost share will be \$5,209. This can easily be accommodated with the \$30,000 in the TID budget for Repair and Maintain (R/M) Pumps and Wells (see **Exhibit 4.5**).

TRANQUILLITY IRRIGATION DISTRICT
GROUNDWATER MONITORING WELL PROJECT
Detailed Project Cost Estimate

STAFF HOURS		Labor Costs						Subcontractors							Direct Costs		Totals	
		Principal Engineer	Senior Engineer	Associate Engineer	Associate Geologist	Technician	Clerical	Subconsultant (Kenneth Schmidt & Associates)	Surveying	Well Construction	Data Loggers	Water Quality Testing	Labor Compliance	Legal Services	Printing & Postage	Total Hours	Total Cost	
07/05/2012	Rate / Hour	\$170	\$140	\$120	\$120	\$95	\$65											
Task 1 Stakeholder Involvement																Task 1 Total = \$4,250		
1.1 Public Outreach		4		4										\$25	8	\$1,185		
1.2 District Board of Directors Meetings (6)		15		3			2							\$25	20	\$3,065		
Task 2 Monitoring Well Design																Task 2 Total = \$18,100		
2.1 Conceptual Design Memorandum		2	4	8	4			\$500							18	\$2,840		
2.2 Prepare Environmental Documents/Permitting				2											2	\$240		
2.3 Well Construction Drawings and Specifications		4	20	20		20								\$50	64	\$7,830		
2.4 Prepare Bidding Documents/Assist with Bidding		4	20	20			4					\$1,000		\$50	48	\$7,190		
Task 3 Monitoring Well Construction																Task 3 Total = \$209,184		
3.1 Well Construction			20	80	20				\$166,450	\$8,984				\$50	120	\$190,284		
3.2 Geologic and Geophysical Logging				10	80										90	\$10,800		
3.3 Surveying			4	4				\$1,360							8	\$2,400		
3.4 Prepare Record Drawings				8		8									16	\$1,720		
3.5 Labor Compliance				4							\$3,500				4	\$3,980		
Task 4 Post Construction Evaluation																Task 4 Total = \$10,480		
4.1 Hydrogeologic/Stratigraphic Evaluation			8		40	8		\$500							56	\$7,180		
4.2 Monitoring Well Sampling and Analytical Testing					20					\$900					20	\$3,300		
Task 5 Project Reporting																Task 5 Total = \$13,195		
5.1 Progress Reports			8	20										\$25	28	\$3,545		
5.2 Draft Project Report		4	20	20	10		4							\$50	58	\$7,390		
5.3 Final Project Report			8	8			2							\$50	18	\$2,260		
Total Hours:		33	112	211	174	36	12											
Total Cost:		\$5,610	\$15,680	\$25,320	\$20,880	\$3,420	\$780	\$1,000	\$1,360	\$166,450	\$8,984	\$900	\$3,500	\$1,000	\$325	578	\$255,209	

DWR GRANT AMOUNT REQUESTED: **\$250,000**
Total Estimated Project Cost: **\$255,209**
Tranquillity ID Project Cost Portion: **\$5,209**



June 25, 2012

PROVOST & PRITCHARD
2505 ALLUVIAL AVE.
CLOVIS, CA 93611

ATTENTION: ERIC ABRAHAMSEN:

PROJECT: MONITORING WELLS
TRANQUILLITY IRRIGATION DISTRICT

THE FOLLOWING ESTIMATE IS FOR GRANT APPLICATION ONLY.

MOBILIZATION	\$ 4,000.00
600 FT. - 8 3/4" BOREHOLE @\$35.00/FT.	\$21,000.00
ONE - E-LOG	\$ 1,800.00
550 FT/ - 2 1/2" PVC SCH 80 BLANK CASING @\$4.50/FT	\$ 2,475.00
50 FT. - 2 1/2" PVC SCH 80 SCREEN @\$5.50/FT	\$ 275.00
550 FT. - 10.3 SACK CEMENT SEAL @\$15.00/FT.	\$ 8,250.00
ONE - SURFACE COMPLETION	\$ 750.00
70 FT. - #8 GRAVEL @\$15.00/FT	\$ 1,050.00
DEVELOPMENT	<u>\$ 1,000.00</u>
	\$ 40,600.00
X 3 =	\$121,800.00
600 FT. - BOREHOLE DRILLING @\$45.00/FT.	\$27,000.00
ONE - E-LOG	\$ 1,800.00
900 FT/ - 2 1/2" BLANK CASING	\$ 4,050.00
100 FT. - 2 1/2" SCREEN CASING	\$ 550.00
240 FT - #8 GRAVEL	\$ 3,600.00
360 FT. - SEAL	\$ 5,400.00
ONE - SURFACE COMPLETION	\$ 750.00
TWO - WELL DEVELOPMENTS	<u>\$ 1,500.00</u>
	\$44,650.00

TOTAL \$166,450.00

PROJECT WILL TAKE APPROXIMATELY 24 WORKING DAYS.

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Drilling

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Price Quote MU-06-12-35404

Eric A Abrahamsen
 Provost & Pritchard Engineering
 2505 Alluvial Ave.
 Clovis
 CA
 93611
 USA

Issued On: 6/20/2012
 Issued By: Eric Coulombe
 Phone: (520) 319-0725
 Fax: (520) 319-0724
 E-mail: Ecoulombe@slb.com

Currency: \$US

Product Name	Description	Qty	Unit Price	Cost
182m DDC Cable 1Y	182m (600') Diver Data Cable - one eye connector assembly	3	\$415.00	\$1245.00
121m DDC Cable 1Y	121m (400') Diver Data Cable - one eye connector assembly	3	\$343.50	\$1030.50
168m DDC Cable 1Y	168m (550') Diver Data Cable - one eye connector assembly	2	\$398.50	\$797.00
PC Interface Cable - USB AS327	Diver Data PC Interface Cable - USB	1	\$325.00	\$325.00
Mini-Diver, range 50 meter DI505	90mm length x 22mm dia., S. S., pressure transducer & temperature datalogger	8	\$525.00	\$4200.00
Baro-Diver, range 1.5 meter DI 500	90mm length x 22mm dia., S. S., pressure transducer & temperature datalogger for barometric compensation	1	\$395.00	\$395.00
Optical Reading Unit - USB AS330	Universal Desktop Reader for Divers w/ USB connection	1	\$192.50	\$192.50



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Tucson, AZ 85745-1444
Phone: (520) 319-0725 Fax: (520) 319-0724
Ecoulombe@slb.com
http://www.slb.com

Price Quote MU-06-12-35404

Notes

Sub Total:	\$8185.00
Shipping:	\$120.00
Total:	\$8305.00

Please note that this quotation does not include tax. Tax may be added to your invoice.

Payment Methods

Bank Transfer Details

- | | |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• Check or Money Order• Purchase Order | <ul style="list-style-type: none">Citi Bank N.A., 399 Park Ave., New York, NY 10022Bank Account Number: 30656377ABA / Transit Number: 021 000 089, Swift Code Number: CITIUS33 |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

+ 8.175% sales tax,
or \$679
= \$8,984

Schlumberger Water Services' Software Products Include:

- 12 months of free technical support via phone, fax, e-mail, or web (new license purchase only)
- 1 year software maintenance (new licence purchases, or for up-to-date maintenance contracts)*

Schlumberger Water Services' Diver Equipment Products Include:

- Free technical support via phone, fax, e-mail, Webex and video conference
- Free Diver-Office software to program, read and manage all of your Diver data
- 3 year manufacturer's warranty against defects

Footnotes:

- Schlumberger Water Services is not responsible for any withholding taxes
- For bank transfer payments please indicate quote number, company name, and contact information
- For purchase order payments, please allow an additional 2-days for processing
- Overseas orders are only shipped upon receipt of payment in full
- * Applicable for selected Schlumberger Water Services' Software Products only (call us for details)



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AGRICULTURAL SERVICES

Irrigation Water Suitability

Please select an analysis below for sampling instructions and container information.

<u>CONSTITUENTS</u>	<u>METHOD</u>	<u>PRICE</u>
Irrigation Water Suitability Irrigation Water Suitability (Alkalinity, bicarbonate, boron, calcium, carbonate, chloride, copper, electrical conductivity, fluoride, gypsum requirement, hydroxide, iron, magnesium, manganese, nitrate, pH, potassium, sodium, SAR, sulfate, total dissolved solids, total hardness, zinc)	Various	\$100.00

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Sample dilutions, special reporting, & special invoicing fees will be arranged on a case by case basis.

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